



## Current Software Assurance Standard based on concepts of

Provider	Acquirer
Those that design, develop, implement, test, operate and maintain software	Those who specify the requirements and accept the resulting software products

### Five Disciplines of Quality Assurance

Quality Assurance

Verification and Validation

Safety

Reliability

Independent Verification and Validation Approach addresses the ideas, but does not directly link the software assurance approach to the software development approach

### **GOAL**

*Develop a standard that ties closely to the software engineering approaches*

Kenneth Costello, Kenneth.A.Costello@nasa.gov, NASA

NASA POC: Kenneth Costello, Kenneth.A.Costello@nasa.gov

## Software engineering captured in NPR7150.2

### Process based standard

- . What does Software Assurance need to do with respect to a given software engineering process?
- . What does Software Assurance need to do to manage its activities?

The updated standard directly addresses each of the specific areas of NPR7150.2

- . Allows for direct comparison between the assurance standard and the engineering requirements
- . Aids in the understanding of the value of assurance with respect to engineering tasks

The new standard covers the following topics

- . Software Assurance Management Requirements
- . Software Assurance Life-cycle Requirements
- . Software Support Process Assurance

The update provides more clarity with respect to the interactions of not only Software Assurance with Software Engineering, but also amongst the individual components of Software Assurance

NASA Independent Verification and Validation Facility  
Fairmont, West Virginia

